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WELLA AG \*DE 29909427-U1  
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**Oxidizable agents for use in dyeing keratin fibers in red shades**  
**C1999-120322**

#### NOVELTY

Agents for oxidative dyeing of keratin fibers are new, and are mixed immediately prior to use with an oxidant comprising a suitable cosmetic base containing

- (A) one or more specified 4,5-diamino-pyrazole derivatives; and  
(B) one or more couplers comprising 1,3-dihydroxybenzene, 1,3-diaminobenzene or 3-aminophenol or their derivatives.

#### DETAILED DESCRIPTION

Agents for oxidative dyeing of keratin fibers which are mixed immediately prior to use with an oxidant comprise a suitable cosmetic base containing:

- (A) one or more of the following pyrazole derivatives : 4,5-diamino-1-benzyl-1H-pyrazole; 4,5-diamino-1-(4-methyl- or -methoxy- or -chloro-phenyl)methyl-1H-pyrazole; 4,5-diamino-1H-pyrazole; 4,5-diamino-1-(3-methoxy-phenyl)methyl-1H-pyrazole; 4-amino-5-

D(8-B6) E(6-A2E, 7-D8, 10-A13B2, 10-B1A, 10-B3A, 10-E2D, 10-E2E2, 26-A3, 26-C)

dimethylamino-1-methyl-1H-pyrazole; 4-amino-5-methylamino-1-(4-methoxy-phenyl)methyl-1H-pyrazole; 4-amino-5-(2-hydroxyethyl)amino-1-(4-methoxy-phenyl)methyl-1H-pyrazole; 4-amino-5-methylamino-1-(2-hydroxyethyl)-1H-pyrazole; 4,5-diamino-1-(2-hydroxyethyl)-1H-pyrazole; 4,5-diamino-1-(methyl)-1H-pyrazole; or 4,5-diamino-1-(1-methylethyl)-1H-pyrazole; and

- (B) one or more couplers comprising 1,3-dihydroxybenzene, 1,3-diaminobenzene or 3-aminophenol or their derivatives.

#### USE

Especially for dyeing human hair in red shades.

#### ADVANTAGE

Improved properties such as resistance to light and to washing-out, etc.

#### EXAMPLE

A hair dye which could be applied at 40 °C for 30 minutes to give  
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a Bordeaux red shade was obtained by mixing 10g solution (I) with 10g 6% aqueous H<sub>2</sub>O<sub>2</sub> solution, solution (I) comprising 4.3g agent made up of 2.7g 4,5-diamino-1-benzyl-1H-pyrazole sulfate, 1g 5-amino-2-methylphenol, 0.3g 1,3-bis-(2,4-diaminophenoxy)propane tetrahydrochloride and 0.3g 2-amino-4-[(2-hydroxyethylamino)]-anisole sulfate, 10g 25% aqueous ammonia, 0.3g ascorbic acid, 10g iso-PrOH, 10g 25% aqueous solution of lauryl alcohol-diglycoether sulfate Na salt, and water to 100g.

#### TECHNOLOGY FOCUS

Organic Chemistry - Coupler (B) is resorcinol; 2-methylresorcinol; 4-(2-hydroxyethyl)-1,2-methylenedioxybenzene; 1,3-bis-(2,4-diaminophenoxy)propane; 1-naphthol; 3-aminophenol; 5-amino-2-methylphenol; 5-amino-4-fluoro-2-methylphenol; 2-amino-4-(2-hydroxyethyl)aminoanisole; 1,3-diamino-6-fluoro-4-methylbenzene; 2,4-diamino-1-(2-hydroxyethyl)-benzene; or N-(3-dimethylamino)-phenylurea. The agent also contains a developer and/or direct dye and is mixed with the oxidant in a ratio of 5:1 - 1:3, the pH of the prepared dye being 3-11.  
(50pp1958DwgNo.0/0)

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